



National Healthcare Safety Network (NHSN)

NHSN Analysis:
Advanced Features & Terminology

Training Session for NHSN Hospitals
December 19, 2006

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Agenda

- Graphical Output Types
- Advanced Output Options
- Exporting Data
- Creating Output Sets
- Publishing Output Options
- Demonstrate Analysis Capabilities
- Q & A



Questions To Answer

- What Graphics Can I Create?
- What Advanced Features Exist?
- How Can I Export My Data?
- How Can I Combine Output Together?
- How Can I Share Custom Output Options?
- Demo Analysis Capabilities
- Q & A



What Graphics Can I Create?

Answer: A user can generate bar charts, pie charts, run charts, and control charts.

A user can create graphical output by clicking the **Run** button beside the desired graphical output option in the Analysis Output Options Treeview. Also, a user can click the **Modify** button beside the output option and then click the **Run** button at the bottom of the design parameter page.



Department of Health and Human Services
Centers for Disease Control and Prevention

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Logged into DHQP Memorial Hospital (ID 10000) as JDE.
Facility DHQP Memorial Hospital (ID 10000) is following PS component.

Patient Safety Component

Analysis Output Options

Expand All Collapse All

- Device-Associated Module
 - All Device-Associated Events
 - Central Line-Associated BSI
 - CDC Defined Output

Line Listing - All CLAB Events	Run	Modify
Frequency Table - All CLAB Events	Run	Modify
Bar Chart - All CLAB Events	Run	Modify
Pie Chart - All CLAB Events	Run	Modify
Rate Table - CLAB Data for ICU-Other	Run	Modify
Control Chart - CLAB Data for ICU-Other	Run	Modify
Rate Table - UCAB/CLAB Data for NICU	Run	Modify
Control Chart - UCAB/CLAB Data for NICU	Run	Modify
Rate Table - CLAB Data for SCA	Run	Modify
Control Chart - CLAB Data for SCA	Run	Modify



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 - Control Chart - CLAB Data for ICU-Other
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 - Control Chart - UCAB/CLAB Data for NICU
 - Rate Table - CLAB Data for SCA
 - Control Chart - CLAB Data for SCA

Run	Modify

Bar Chart

Pie Chart

Control Chart



Key Terms

- **Control Chart**: A line plot that displays values of a given measure over time that includes one or more additional lines to indicate whether or not the measure is in control.
- **Run Chart**: A basic line plot of values over time for a given measure.



What Advanced Features Exist?

Answer: A user can create new custom output options “from scratch,” make use of custom fields when creating output and define & output custom rates

In the Advanced section of the Analysis Output Option Treeview, a user can click **Create New Custom Option** to have greater flexibility in accessing Analysis Data Sets and Output Options.



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Patient Safety Component

Analysis Output Options

Expand All Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- Advanced
 - [Create New custom Option](#)
 - Event-level Data
 - Procedure-level Data
 - Device Denominator-level Data
 - Pathogen-level Data
- My Custom Output
- Published Output

← Click to create advanced output options



How Can I Export My Data?

Answer: A user can perform three types of exports

1. Facility Data Export
2. Analysis Data Set Export
3. Output Data Set Export

A user can export their facility's entire data, a specific Analysis Data Set, or Output Data Set using a number of popular file formats (e.g. MS Excel).



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Logged into DHQP Memorial Hospital (ID 10000) as JDE.
Facility DHQP Memorial Hospital (ID 10000) is following PS component.

Welcome to the NHSN Home Page.

Use the Navigation bar on the left to access the features of the application.



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Assurance of Confidentiality: The information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).

Facility Data Export



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Line Listing

Analysis Data Set: CLAB_Events

Export Analysis Data Set

Analysis Data Set Export

Modify Attributes of the Output:

Last Modified On: 12/18/2006

Output Type: Line Listing

Output Name: Line Listing - All CLAB Events

Output Title: Line Listing for All Central Line-Associated BSI Events

Select output format:

Output Format: HTML

Use Variable Labels

Date variable: beginning: ending:

Enter Date variable/Time period at the time you click the Run button

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)

| <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

Output Data Set Export





Key Terms

- **Facility Data Export**: an export that creates a copy of all facility data and places these data in a user-specified file format.
- **Analysis Data Set Export**: an export that creates a copy of an Analysis Data Set in a user-specified file format.
- **Output Data Set Export**: an export that creates a copy of an Output Data Set in a user-specified file format.



How Can I Combine Output?

Answer: A user can combine output together from two or more output options (e.g., line listing, frequency table, rate table) by creating an Output Set.

An Output Set can be created by expanding the My Custom Output section of the Analysis Output Option Treeview, expanding the Output Sets section and clicking **Create New Output Set.**



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Patient Safety Component

Analysis Output Options

Expand All Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- Advanced
- My Custom Output

Rate Table - CLAB Data for ICU-Other	Run	Modify	Delete
My Custom Line Listing - All CLAB Events	Run	Modify	Delete
Custom #1 Line Listing - All CAU Events	Run	Modify	Delete

Output Sets

[Create New Output Set](#) ← **Create a new Output Set**

New Set 1 Run Modify Delete

Published Output



Key Term

- **Output Set**: an output option that groups two or more existing individual output options that are CDC-Defined, custom or published output.



How Can I Share Custom Output Options?

Answer: A user can share a custom output option by publishing it.

Each custom output option that a user creates can be published by clicking the **Publish** button at the bottom of the design parameter page for that output option. The design parameter page will be displayed when clicking the **Modify** button beside the output option to be published.

Date variable: beginning: ending:

Enter Date variable/Time period at the time you click the Run button

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)

| <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|
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| | | | | |

Other Options:

[Print Variable Reference List](#)

Modify Variables To Display By Clicking: [Modify List](#)

Specify Sort Variables By Clicking: [Modify List](#)

Select Page by variable:

Publish button





Key Term

- **Published Output Option**: a custom output option that has been published by a user. This published output option can be modified without changing the original design.





Support

- Online help messages within NHSN
- Email: nhsn@cdc.gov
- Phone support:
[800-893-0485](tel:800-893-0485) or [404-498-1250](tel:404-498-1250)
- Members website:
http://www.cdc.gov/ncidod/dhqp/nhsn_members.html



Questions?

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